News Release

Defense Advanced Research Projects Agency

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Arlington, VA 22203-1714

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MICRO AIR VEHICLES PROVIDE SOLDIERS A BIRDS-EYE VIEW

Micro air vehicles developed under the Defense Advanced Research Projects Agency's Micro Air Vehicle (MAV) Advanced Concept Technology Demonstration (ACTD) received positive reviews from 25th Infantry Division soldiers after experiments with military users in October. The vehicle's ability to hover and stare in urban and complex environments, and its ease of employment showed promise for use during a variety of tactical operations.

During the tests, an infantry scout platoon used the MAV to obtain reconnaissance information instead of sending out soldiers to conduct reconnaissance missions. The soldiers also used the MAV to conduct aerial reconnaissance prior to driving a convoy route, and to provide information on the location of opposing forces. The use of the MAV provided the platoon with better situational awareness, and led to less confusion during tactical operations.

The MAV is a fully autonomous system but can be re-programmed and controlled in flight if the mission changes. Soldiers can be trained on vehicle operation in less than 24 hours and then can immediately begin to operate the vehicle for proficiency training. Unlike other unmanned aerial systems, no specialized military training is needed to operate the MAV or exploit its data and imagery. During the October tests, soldiers who were familiar with commercial video games found it easy to learn to operate the MAV.

The MAV system consists of two air vehicles with support equipment of fuel, batteries, an observer/controller unit, remote video terminal and starter. Each vehicle weighs about 17 pounds fully fueled, is 13 inches in diameter and designed to be transported in a back pack. The vehicle operates at altitudes of 100 to 500 feet above ground level, and can provide forward and down-looking day or night video or still imagery. The vehicle will operate in a variety of weather conditions including rain and moderate winds.

The three-phase MAV ACTD conducted initial design and development from April 2002 through February 2005. The program's second phase included initial flight tests and experiments at the McKenna urban training site at Fort Benning, Ga., and concluded with the recently completed user evaluations with the 25th Infantry Division. Over the next year, the

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program will improve the system based on user feedback and deliver 25 additional, improved systems to the 25th Infantry Division beginning in July 2006 for five months of user evaluations. Among other improvements, these new systems will have increased vehicle endurance, improved sensor performance, and better observer/controller units.

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Media with questions, please contact Jan Walker, (703) 696-2404, or jan.walker[at]darpa.mil. Contractors or military organizations, contact Dr. Brad Tousley at (703) 696-2355.